

## Federal Communications Commission

## § 73.6025

channel in a distributed transmission system.

[73 FR 74064, Dec. 5, 2008]

### § 73.6024 Transmission standards and system requirements.

(a) A Class A TV station must meet the requirements of §§ 73.682 and 73.687, except as provided in paragraph (b) of this section.

(b) A Class A TV station may continue to operate with the transmitter operated under its previous LPTV license, provided such operation does not cause any condition of uncorrectable interference due to radiation of radio frequency energy outside of the assigned channel. Such operation must continue to meet the requirements of §§ 74.736 and 74.750 of this chapter.

(c) A Class A TV station must meet the offset carrier frequency and frequency tolerance provisions of § 73.1545 of this part.

(d) A digital Class A station must meet the emission requirements of § 74.794 of this chapter.

[65 FR 30009, May 10, 2000, as amended at 66 FR 21690, May 1, 2001; 69 FR 69331, Nov. 29, 2004]

### § 73.6025 Antenna system and station location.

(a) Applications for modified Class A TV facilities proposing the use of directional antenna systems must be accompanied by the following:

(1) Complete description of the proposed antenna system, including the manufacturer and model number of the proposed directional antenna. In the case of a composite antenna composed of two or more individual antennas, the antenna should be described as a "composite" antenna. A full description of the design of the antenna should also be submitted.

(2) Relative field horizontal plane pattern (horizontal polarization only) of the proposed directional antenna. A value of 1.0 should be used for the maximum radiation. The plot of the pattern should be oriented so that 0 degrees (True North) corresponds to the maximum radiation of the directional antenna or, alternatively in the case of a symmetrical pattern, the line of symmetry. Where mechanical beam tilt is intended, the amount of tilt in degrees

of the antenna vertical axis and the orientation of the downward tilt with respect to true North must be specified, and the horizontal plane pattern must reflect the use of mechanical beam tilt.

(3) A tabulation of the relative field pattern required in paragraph (a)(2), of this section. The tabulation should use the same zero degree reference as the plotted pattern, and be tabulated at least every 10 degrees. In addition, tabulated values of all maxima and minima, with their corresponding azimuths, should be submitted.

(4) Horizontal and vertical plane radiation patterns showing the effective radiated power, in dBk, for each direction. Sufficient vertical plane patterns must be included to indicate clearly the radiation characteristics of the antenna above and below the horizontal plane. In cases where the angles at which the maximum vertical radiation varies with azimuth, a separate vertical radiation pattern must be provided for each pertinent radial direction.

(5) The horizontal and vertical plane patterns that are required are the patterns for the complete directional antenna system. In the case of a composite antenna composed of two or more individual antennas, this means that the patterns for the composite antenna, not the patterns for each of the individual antennas, must be submitted.

(b) Applications for modified Class A TV facilities proposing to locate antennas within 61.0 meters (200 feet) of other Class A TV or TV broadcast antennas operating on a channel within 20 percent in frequency of the proposed channel, or proposing the use of antennas on Channels 5 or 6 within 61.0 meters (200 feet) of FM broadcast antennas, must include a showing as to the expected effect, if any, of such proximate operation.

(c) Where a Class A TV licensee or permittee proposes to mount its antenna on or near an AM tower, as defined in § 1.30002, the Class A TV licensee or permittee must comply with § 1.30003 or § 1.30002.